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a' cont.
of a plunger of said actuator at a substantially constant value over a fractional actuation range.

3. (Once Amended) A method for controlling an actuator, said method comprising maintaining a forced resonant frequency of a plunger of said actuator substantially constant at a maximum maintainable value over a fractional actuation range.
4. (Once Amended) A method for controlling an actuator, said method comprising maintaining a forced resonant frequency of a plunger of said actuator substantially at a value of a natural mechanical resonant frequency of said plunger, said forced resonant frequency being maintained at the value of said natural mechanical resonant frequency over an actuation range.
5. (Once Amended) A method for controlling an actuator over an actuation range, said method comprising:
 - employing an actuating impetus that is non-linear with displacement;
 - using displacement as the only measured feedback signal; and,
 - keeping a forced resonant frequency of a plunger of the actuator substantially constant under actuation.
6. (Once Amended) A method as in claim 5, wherein said actuating impetus is controlled by a software control algorithm.
7. (Once Amended) A method as in claim 5, wherein said forced resonant frequency is kept substantially at a constant value over a fractional actuation range, said constant value being substantially equal to a maximum attainable oscillation frequency of said plunger under actuation over said fractional range.

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- a' amended.*
8. (Once Amended) A method as in claim 5, wherein said forced resonant frequency is maintained substantially equal to a natural mechanical resonant frequency of said plunger.
9. (Once Amended) A method as in claim 6 comprising imposing a constant actuation gradient on said actuator as long as a desired actuating signal to said actuator is constant.
10. (Once Amended) A method as in claim 9, wherein the forced resonant frequency is substantially equal to a maximum attainable oscillation frequency of said plunger under actuation over a fractional actuation range.
11. (Once Amended) A method as in claim 9 wherein said forced resonant frequency is substantially equal to a natural resonant frequency of said plunger.
14. (Once Amended) A method for controlling an actuator over an actuation range, said method comprising
 actuating the plunger of said actuator using one of electromagnetic and electrostatic force to provide an actuating force ;
 measuring a plunger displacement as a feedback signal;
 obtaining a first calibration relationship of plunger displacement as a function of activating impetus;
 an actuation gradient as a function of the plunger displacement, said actuation gradient being chosen to impose a constant forced resonant frequency on said plunger at each displacement ; and ,
 keeping said forced resonant frequency of said plunger substantially constant over said actuation range.

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cncl'd.*
16. (Once Amended) A method as in any of claims 1 to 11 or 14 wherein said actuator is a microelectromechanical actuator.
 17. (Once Amended) A method as in claim 2, wherein said fractional actuation range includes at least a portion of a snap-down region of said actuator.
 18. (Once Amended) A method as in claim 3, wherein said fractional actuation range includes at least a portion of a snap-down region of said actuator.
 19. (Once Amended) A method as in claim 4, wherein said fractional actuation range includes at least a portion of a snap-down region of said actuator.
 20. (Once Amended) A method as in claim 5, wherein said fractional actuation range includes at least a portion of a snap-down region of said actuator.
 21. (Once Amended) A method as in claim 9, wherein said fractional actuation range includes at least a portion of a snap-down region of said actuator.
 22. (Once Amended) A method as in claim 14, wherein said fractional actuation range includes at least a portion of a snap-down region of said actuator.
 23. (Once Amended) A method as in claim 16, wherein said fractional actuation range includes at least a portion of a snap-down region of said actuator.

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Add new claims 24 to 26 as follows:

- a3
24. (New) A method as in claim 5 wherein the plunger comprises a cantilever and controlling the actuator comprises deflecting the cantilever.
 25. (New) A method as in claim 24 wherein the cantilever comprises a micromachined cantilever and deflecting the cantilever comprises applying an electrostatic potential between the cantilever and an electrode.
 26. (New) A method as in claim 5 wherein controlling the actuator comprises separately and concurrently controlling a displacement of the plunger and a slope of the actuating impetus with respect to the displacement of the plunger.